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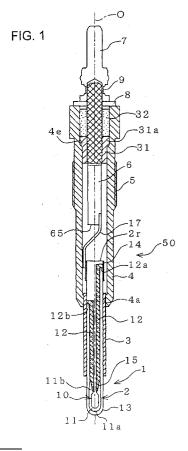
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- (71) Applicant: NGK SPARK PLUG CO., LTD Mizuho-ku Nagoya-shi Aichi (JP)
- (72) Inventors:
 - Watanabe, Hiroki
 Mizuho-ku, Nagoya, Aichi (JP)

- Matsubara, Katsura Mizuho-ku, Nagoya, Aichi (JP)
- Ito, Masaya
 Mizuho-ku, Nagoya, Aichi (JP)
- (74) Representative: Nicholls, Michael John J.A. KEMP & CO.
 14, South Square Gray's Inn London WC1R 5JJ (GB)
- (54) Silicon nitride-tungsten carbide composite sintered material
- A silicon nitride tungsten carbide composite sintered which contains silicon nitride and tungsten carbide, and is characterized in that the total in amounts of an entirety of rare earth elements as reduced to certain corresponding oxides thereof, the elements being contained in the sintered material, and excess oxygen as reduced to silicon dioxide is 6-20 mass%; the ratio, on a mol basis, of (the amounts of rare earth elements as reduced to the certain corresponding oxides thereof)/ (the amounts of the rare earth elements as reduced to the corresponding oxides thereof + the amount of excess oxygen as reduced to silicon dioxide) is 0.3-0.7; a crystalline phase is present in an intergrain region of the sintered material; and an effective firing temperature range within which a flexural strength of at least 800 MPa is obtained encompasses at least 100 degrees C.





EUROPEAN SEARCH REPORT

Application Number EP 01 31 0248

Category	Citation of document with ir of relevant passa	ndication, where appropriate, ges	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.CI.7)	
X	<pre>* page 4, paragraph * page 5, paragraph * page 9, paragraph</pre>	000-11-22) 1 12 - paragraph 17 * 1 22 - paragraph 25 * 1 36 - paragraph 37 *	1-9	C04B35/596 C04B35/56 F23Q7/00	
Α	US 5 750 958 A (OHM 12 May 1998 (1998-6 * claims 1-4 * * column 5, line 28		1-9		
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A	EP 0 874 534 A (NGK 28 October 1998 (19 * page 2, line 1 - * claims 1-10 *	98-10-28)	1-9	TECHNICAL FIELDS SEARCHED (Int.Cl.7) H05B F23Q F02P C04B	
	The present search report has I	peen drawn up for all claims			
	Place of search	Date of completion of the search	`	Examiner	
X : part Y : part docu A : tech O : non	THE HAGUE ATEGORY OF CITED DOCUMENTS icularly relevant if taken alone icularly relevant if combined with anot iment of the same category nological background -written disclosure mediate document	L : document cited fo	underlying the ir ument, but publis the application r other reasons	shed on, or	

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